

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A system for performing a switch-over in data communication within a data computing device in accordance with protection switching data communication principles, said system comprising said data computing device arranged to operate in a data network according to the protection switching data communication principles, the data computing device comprising:

a first unit; and

~~a protection pair unit—that is a different hardware unit from said first unit;~~

wherein a configurable integrated circuit of said first unit is arranged to send sends a signal that signals a need for the switch-over in real time based data communication to a configurable integrated circuit of the protection a protecting pair unit of said unit of said data computing device, and

wherein said configurable integrated circuit of said protecting protection pair unit is structured and arranged to perform the switch-over independently of a CPU, when the switch-over is needed.

2. (previously presented) The system according to claim 1, wherein the system provides the signaling between the first unit and the protection pair unit without a participation of the CPU.

3. (previously presented) The system according to claim 1, wherein each of the configurable integrated circuits comprises at least one of application-specific integrated circuit and field-programmable gate array.

4. (previously presented) The system according to claim 1, wherein the protection switching comprises a protected LSP based on a working connection and a protecting connection.

5. (previously presented) The system according to claim 1, wherein said first unit comprises a working unit in accordance with a LSP working connection and the protection pair unit comprises a protection unit in accordance with a LSP protection connection.

6. (previously presented) The system according to claim 1, wherein the signal comprises a protection message for delivering that the data communication of a receiving unit is at least one of faulty and unfaulty.

7. (previously presented) The system according to claim 1, wherein the real time based data communication presumes the switch-over to take place in less than 50 milliseconds from an occurrence of a connection fault.

8. (previously presented) The system according to claim 1, wherein the data communication comprises at least one of Internet Protocol, Ethernet, and MPLS for real time telecommunication services.

9. (previously presented) The system according to claim 1, wherein Multiprotocol Label Switching is contained as a bearer for the data communication.

10. (previously presented) The system according to claim 12, wherein Multiprotocol Label Switching operates as a backbone for IP based data communication.

11. (previously presented) The system according to claim 1, wherein the real time based data communication is such that human senses any application based on the real time based data communication substantially immediate.

12. (previously presented) The system according to claim 1, wherein the data communication takes place between a source computing entity and a sink computing entity.

13. (currently amended) A data computing device for performing a switch-over in data communication within said data computing device in accordance with a protection switching data communication principles, said data computing device is structured and arranged to operate in a data network according to the protection switching data communication principles, the data computing device comprising:

a first unit; and

~~a protection pair unit—that is a different hardware unit from said first unit;~~

wherein a configurable integrated circuit of said first unit ~~sends—is arranged to send~~ a signal that signals a need for the switch-over in real time based data communication to a configurable integrated circuit of ~~the protection~~ ~~a protecting~~ pair unit ~~of said unit of said data computing device~~, and

wherein said configurable integrated circuit of said ~~protecting~~ ~~protection~~ pair unit of said data computing device is structured and arranged to perform the switch-over independently of a CPU, when the switch-over is needed.

14. (currently amended) The data computing device according to claim 13,

wherein the configurable integrated circuit of the first unit is embodied on a first configurable integrated circuit card ~~said card signals the need for the switch over in real time based data communication to a~~ and the configurable integrated circuit of ~~the protection a protecting~~ pair unit is embodied on a second configurable integrated circuit card ~~of said card~~.

15. (currently amended) A method for performing a switch-over in data communication within a data computing device in accordance with a protection switching data communication principles, the method comprising:

signaling a need for the switch-over in real time based data communication from a configurable integrated circuit of a first unit of said data computing device to a configurable integrated circuit of a ~~protecting protection~~ pair unit ~~of said first unit~~ of said data computing device, ~~said protection pair unit is a different hardware unit from said first unit~~; and

performing the switch-over by said configurable integrated circuit of said protection ~~protecting~~ pair unit of said data computing device independently of a CPU,

wherein said data computing device is arranged to operate in a data network according to the protection switching data communication principles and contains both the configurable integrated circuit of said first unit and said configurable integrated circuit of said protection ~~protecting~~ pair unit.

16. (previously presented) The method according to claim 15, further comprising before the step of signaling the step of detecting a connection fault in the data communication at the first unit.

17. (currently amended) The method according to claim 15, further comprising the step of receiving the signal indicating the need for the switch-over at the ~~protecting~~ protection pair unit and performing the switch over by activating the data communication on the protection ~~protecting~~ pair unit.

18. (canceled)

19. (currently amended) The system according to claim 1, wherein said first unit comprises a card and said protection ~~protecting~~ pair unit comprises another card.

20. (currently amended) The system according to claim 5, wherein said working unit comprises a card and said protection ~~protecting~~-unit comprises another card.

21. (currently amended) The system according to claim 1, wherein said first unit is structured and arranged to send a protection message to said protection ~~protecting~~-pair unit, said protection ~~protecting~~-pair unit is structured and arranged to interpret the message and perform the switch-over, if necessary.

22. (previously presented) The system according to claim 3, wherein each of said configurable integrated circuits is an application-specific integrated circuit.